



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/217,542	12/21/1998	JAMES MORRISON	8055	8206

26884 7590 06/06/2005

PAUL W. MARTIN
LAW DEPARTMENT, WHQ-4
1700 S. PATTERSON BLVD.
DAYTON, OH 45479-0001

EXAMINER

LASTRA, DANIEL

ART UNIT

PAPER NUMBER

3622

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/217,542

Applicant(s)

MORRISON, JAMES

Examiner

DANIEL LASTRA

Art Unit

3622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 3622

1. Claims 1-26 have been examined. Application 09/217,542 (Method and apparatus for determining if a user walks away from a self-service checkout terminal during operation thereof) has a filing date 12/21/1998.

Response to Amendment

2. In response to Non Final Rejection filed 11/29/2004, the Applicant filed an Amendment on 03/16/2005, which amended claims 1, 3-7, 14, 16-19 and added new claims 19-26.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Addy et al (U.S. 6,056,087) in view of Terranova (U.S. 6,098,879).

As per claims 1 and 14, Addy et al teach:

recording a number of merchandise items for purchase by a user by said self-service checkout terminal (see Addy column 1, lines 30-41);

Addy et al teach a system with a processing unit that monitors output signals generated by a scanner, a video system and a light curtain device in order to supervise and provide security monitoring of a given checkout procedure. In addition, if the light

Art Unit: 3622

curtain device detects that the customer placed an item in the post-scan area but the video system did not detect motion associated with the customer attempting to scan the item, and the scanner did not read a product identification code associated with the item, it can be inferred with a high degree of confidence that the customer was intentionally operating the self-service checkout terminal improperly. Since the customer appears to have made no attempt to scan the item prior to placing the item in the post-scan area, an entry is made in a log. A security officer may be paged to audit or otherwise investigate the customer's transaction if the log entry exceeds a threshold value (see column 8, lines 10-45).

Addy et al do not teach "detecting *movement of said user as said user walks through a number of boundaries of an adjacent checkout floor area of said self-service checkout terminal* and generating a walk-away control signal in response thereto;

determining if a payment-tendered control signal was received by the self-service checkout terminal indicative of said user having tendered payment for said merchandise items while within the adjacent checkout floor area; and

generating a personnel-request control signal *in response to said walk-away control signal if said payment-tendered control signal was not received by the self-service checkout terminal*. However, Terranova teaches a system that detects the movement of a customer using a self-service checkout terminal (see Terranova column 11, lines 1-21; column 1, lines 34-40) and alerts security personnel when it detects that said customer is attempting to walk-away from a checkout terminal before generation of a payment-tendered control signal (see Terranova column 34, lines 17-41). Therefore, it

would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that the Addy et al system would summoned security personnel, when it detects that a customer walks pass a certain boundary in a checkout terminal which would indicate that said customer is walking away from said checkout terminal before generation of a payment-tendered control signal, as taught by Terranova. This feature would prevent a customer using a self-service checkout terminal to leave the store without paying for the merchandise.

As per claims 2 and 15, Addy and Terranova teach:

“operating a summoning device so as to summon retail personnel in response to generation of said personnel-request control signal” (see Addy column 8, lines 31-45).

As per claim 4, Addy and Terranova teach:

The method of claim 1, wherein said detecting step includes detecting if said user *walks away from said adjacent checkout floor area* of said retail store so as to return to a shopping area of said retail store *different from the adjacent checkout floor area* and generating a return-to-shopping control signal in response thereto, further comprises the steps of:

detecting if said user *walk back* to said *adjacent checkout floor area* of said retail store from said shopping area of said retail store and generating a return-to-terminal control signal in response thereto; and operating said self-service checkout terminal so as to allow said user to continue a retail transaction in response to generation of said return-to-terminal control signal. Terranova teaches a system that detects if a customer returns to a checkout area and allows the customer to continue a retail transaction in

Art Unit: 3622

response to said detecting (see column 34, lines 16-42). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that the Addy system would determine if the user is returning to the shopping area and is not leaving the store, and would trigger or disable a signal accordingly. This feature would allow the customer to complete the financial transaction.

As per claim 6, Addy and Terranova teach:

The method of claim 1, wherein said detecting step includes detecting if said user walks away from said adjacent checkout floor area of said retail store so as to exit said retail store and generating an existing-store control signal in response thereto, and wherein the method further comprises the steps of:

generating a personnel-needed-immediately control signal in response to generation of a control signal and operating a summoning device so as to summon retail personnel in response to generation of said personnel-needed-immediately control signal (see Addy column 8, lines 31-45).

Claims 3, 5, 7-13, 16-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Addy et al (U.S. 6,056,087) in view of Terranova (U.S. 6,098,879) and further in view of Cotton (US 4,630,110).

As per claims 3, 16, 19 and 23, Addy teaches:

A method of operating a self-service checkout terminal located in a checkout area of a retail store, comprising the steps of:

generating a payment-tendered control signal when a user of said self-service checkout terminal tenders payment for a number of items for purchase (see Addy column 1, lines 30-41),.

Addy fails to teach detecting if said user exits said checkout area of said retail store and generating a walk-away control signal in response thereto, including detecting movement of said user on a movement detection floor mat and generating said walk away control signal if said movement of said user is indicative of an attempt by said user to exit said checkout area of said retail store; and generating a personnel-request control signal if said walk-away control signal is generated prior to generation of said payment-tendered control signal. However, Terranova teaches a system that detects the movement of a customer using a self-service checkout terminal (see Terranova column 11, lines 1-21; column 1, lines 34-40) and alerts security personnel when it detects that said customer is attempting to walk-away from a checkout terminal before generation of a payment-tendered control signal (see Terranova column 34, lines 17-41). Cotton et al teach of a floor sensitive mat that senses the direction a person is walking across the mat (see column 10, lines 45-61). The floor sensitive mat can determine if the person is walking out of the store or if the person is entering the store. From this information, the system triggers a signal to turn on surveillance equipment in a point of sale environment (see column 27, lines 35-67 – column 28, lines 1-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that the Addy et al system would summoned security personnel, when it detects that a customer walks pass a certain boundary in a checkout

Art Unit: 3622

terminal using a movement detection floor mat, as taught by Cotton which would indicate that said customer is walking away from said checkout terminal before generation of a payment-tendered control signal, as taught by Terranova. This feature would prevent a customer using a self-service checkout terminal to leave the store without paying for the merchandise.

As per claims 7, 18, 20, 22, 24 and 26, Addy teaches:

The method of claim 19, further comprising the step of:

operating a summoning device so as to summon retail personnel in response to generation of said personnel request control signal (see column 8, lines 31-45).

As per claims 5, 17 and 21, Addy teaches:

A method of operating a self-service checkout terminal located in a checkout area of a retail store, comprising the steps of:

generating a payment-tendered control signal when a user of said self-service checkout terminal tenders payment for a number of items for purchase (see Addy column 1, lines 30-41);

Addy fails to teach detecting if said user exits said checkout area of said retail store and generating a walk-away control signal in response thereto; detecting if said user exits said checkout area of said retail store so as to return to a shopping area of retail store by detecting movement of said user on a movement detection floor mat in a direction toward said shopping area, and generating a return-to-shopping control signal in response thereto; detecting if said user returns to said checkout area of said retail store from said shopping area of said retail store and generating a return-to-terminal

Art Unit: 3622

control signal in response thereto; operating said self-service checkout terminal so as to allow said user to continue a retail transaction in response to generation of said return-to-terminal control signal; and generating a personnel-request control signal if said walk-away control signal is generated prior to generation of said payment-tendered control signal and if said user does not exit said checkout area of said retail store so as to return to a shopping area of said retail store. Terranova teaches a system that detects if a customer returns to a checkout area and allows the customer to continue a retail transaction in response to said detecting (see column 34, lines 16-42). Cotton et al teach of a floor sensitive mat that senses the direction a person is walking across the mat (see column 10, lines 45-61). The floor sensitive mat can determine if the person is walking out of the store or if the person is entering the store. From this information, the system triggers a signal to turn on surveillance equipment in a point of sale environment (see column 27, lines 35-67 – column 28, lines 1-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that the Addy system would determine if the user is returning to the shopping area and is not leaving the store using the Cotton movement detection floor mat, and would trigger or disable a signal accordingly, as taught by Terranova. This feature would allow the customer to complete the financial transaction.

As per claim 25, Addy teaches:

The retail terminal of claim 23, but fails to teach wherein

said plurality of instructions, when executed by said processing unit, further causes said processing unit to: (a) detect if said user exits said checkout area of said

Art Unit: 3622

retail store so as to return to a shopping area of said retail store with said movement detection floor mat and generate a return-to-shopping control signal in response thereto, b) detect if said user returns to said checkout area of said retail store from said shopping area of said retail store with said movement detection floor and generate a return-to-terminal control signal in response thereto, and (c) operate-said self-service checkout terminal so as to allow said user to-continue a retail transaction in generation of said return-to-terminal control signal. Terranova teaches a system that detects if a customer returns to a checkout area and allows the customer to continue a retail transaction in response to said detecting (see column 34, lines 16-42). Cotton et al teach of a floor sensitive mat that senses the direction a person is walking across the mat (see column 10, lines 45-61). The floor sensitive mat can determine if the person is walking out of the store or if the person is entering the store. From this information, the system triggers a signal to turn on surveillance equipment in a point of sale environment (see column 27, lines 35-67 – column 28, lines 1-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that the Addy system would determine if the user is returning to the shopping area and is not leaving the store using the Cotton movement detection floor mat, and would trigger or disable a signal accordingly, as taught by Terranova. This feature would allow the customer to complete the financial transaction.

Response to Arguments

4. Applicant's arguments filed 03/16/2005 have been fully considered but they are not persuasive. Applicant argues that the references fail to teach detect movement of

Art Unit: 3622

said user as said user walks through a number of boundaries of an adjacent checkout floor area of said self-service checkout terminal. The Examiner answers that it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Terranova would need to set up a boundary line adjacent to a checkout terminal, that if said line is crossed by a customer, said crossing would indicate that said customer is walking away from said terminal.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Williams teaches a system for detecting unauthorized removal of goods from protected premises
- Osterweil teaches a method for monitoring movements of an individual.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL LASTRA whose telephone number is 571-272-6720. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ERIC W STAMBER can be reached on 571-272-6724. The right-fax number of the Examiner is 571-273-6720.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Daniel Lastra

May 14, 2005


RETTA YEHEDEGA
PRIMARY EXAMINER